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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/736,380

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Anand Joshi

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EXAMINER

BROWN, MICHAEL J

ART UNIT

PAPER NUMBER

2116

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/736,380

Applicant(s)

JOSHI ET AL.

Examiner

Michael J. Brown

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Item 835 in Fig. 8 is not shown in the Specification and “mass storage device 14” is not represented in the Drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 24 and 38 are objected to because of the following informalities: Line 6 of claim 24 reads “region to the memory device”, this should read “region to a memory device”. Similarly line 5 of claim 38 reads “program code for the computer system”, this should read “program code for a computer system”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Singer et al.(US Patent 7,017,040).

As to claim 1, Singer discloses a method of updating a non-essential region(signed data portion 54, see Fig. 2) stored in a memory device(flash memory 26, see Fig. 1) in a computer system(system 10, see Fig. 1), the method comprising building an image file(BIOS update file 50, see Fig. 2), the image file comprising an essential region(unsigned data portion 56, see Fig. 2) for storing program code required for booting the computer system and the non-essential region for storing optional program code(signed data 60, see Fig. 2) for the computer system(see Item 102, Fig 3). Singer also discloses the method comprising copying the image file to the memory device in the computer system(see Item 114, Fig. 3), and updating only the non-essential region in the memory device to update the non-essential data(see column 4, lines 12-19).

As to claim 2, Singer discloses the method wherein the non-essential region in the image file comprises at least one non-essential block(see signed data portion 54 and signed data 60, Fig. 2).

As to claim 3, Singer discloses the method further comprising reserving at least one of a plurality of sectors(flash memory modules 28, see Fig. 1) in the memory device for storing the at least one non-essential block.

As to claim 4, Singer discloses the method wherein updating the non-essential region in the memory device comprises mapping the at least one non-essential block to the at least one reserved sector in the memory device(see column 2, lines 38-52).

As to claim 5, Singer discloses the method wherein updating the non-essential region in the memory device comprises mapping each non-essential block to a portion of the at least one reserved sector in the memory device(see column 2, lines 38-52).

As to claim 6, Singer discloses the method wherein the portion of the at least one reserved sector in the memory device is a paragraph multiple(see column 2, lines 38-52).

As to claim 7, Singer discloses the method wherein the program code in the essential region comprises a power-on self test (POST) routine(see column 2, lines 27-37).

As to claim 8, Singer discloses the method wherein the at least one non-essential block comprises a header(BIOS file header 52, see Fig. 2) and at least one module(update code 62, see Fig. 2).

As to claim 9, Singer discloses the method wherein the header is located at the beginning of the at least one non-essential block(see Fig. 2).

As to claim 10, Singer discloses the method wherein the header comprises a pointer to a first module in the at least one non-essential block(see Fig. 2).

As to claim 11, Singer discloses the method wherein the at least one module comprises a module header(volume header 58, see Fig. 2) and module data(data 61, see Fig. 2).

As to claim 12, Singer discloses the method wherein the module header comprises a pointer to a next module in the at least one non-essential block(see Fig. 2).

As to claim 13, Singer discloses the method wherein the module data comprises at least one of graphics data, a language module, and diagnostic tools(see column 2, lines 45-47).

As to claim 14, Singer discloses a computer system(system 10, see Fig. 1) for updating non-essential data(signed data portion 54, see Fig. 2) in a memory device(flash memory 26, see Fig. 1), comprising the memory device for storing an image file(BIOS update file 50, see Fig. 2), the image file comprising an essential region(unsigned data portion 56, see Fig. 2) for storing program code required for booting the computer system and the non-essential region for storing optional program code(signed data 60, see Fig. 2) for the computer system(see Item 102, Fig 3). Singer also discloses the computer system comprising a memory(memory 14, see Fig. 1) for storing a program(BIOS installation process 25, see Fig. 1) containing code for updating the image file stored in the memory device, and a processor(processor 12, see Fig. 1),

functionally coupled to the memory and associated with the memory device, wherein the processor is responsive to computer-executable instructions contained in the program and operative to copy the image file to the memory device(see Item 114, Fig. 3), and update only the non-essential region in the memory device to update the non-essential data in the memory device(see column 4, lines 12-19).

As to claim 15, Singer discloses the computer system wherein the non-essential region in the image file comprises at least one non-essential block(see signed data portion 54 and signed data 60, Fig. 2).

As to claim 16, Singer discloses the computer system wherein the memory device comprises a plurality of sectors(flash memory modules 28, see Fig. 1) for storing the at least one non-essential block.

As to claim 17, Singer discloses the computer system wherein the at least one non-essential block comprises a header(BIOS file header 52, see Fig. 2) and at least one module(update code 62, see Fig. 2).

As to claim 18, Singer discloses the computer system wherein the header is located at the beginning of the non-essential block(see Fig. 2).

As to claim 19, Singer discloses the computer system wherein the at least one module comprises a module header(volume header 58, see Fig. 2) and module data(data 61, see Fig. 2).

As to claim 20, Singer discloses the computer system wherein the module data comprises program code(see Fig. 2).

As to claim 21, Singer discloses the computer system wherein the module data comprises at least one of graphics data, a language module, and diagnostic tools(see column 2, lines 45-47).

As to claim 22, Singer discloses the computer system wherein the essential region in the image file comprises critical program code(see column 2, lines 53-55).

As to claim 23, Singer discloses the computer system wherein the critical program code comprises a power-on self test (POST) routine(see column 2, lines 27-37).

As to claim 24, Singer discloses a computer-readable medium(system 10, see Fig. 1) having computer-executable instructions for performing steps comprising building an image file(BIOS update file 50, see Fig. 2), the image file comprising an essential region(unsigned data portion 56, see Fig. 2) for storing program code required for booting the computer system and a non-essential region(signed data portion 54, see Fig. 2) for storing optional program code(signed data 60, see Fig. 2) for the computer system(see Item 102, Fig 3). Singer also discloses the computer-readable medium comprising instructions for copying the essential region and the non-essential region to a memory device(flash memory 26, see Fig. 1) (see Item 114, Fig. 3), and updating only the non-essential region in the memory device(see column 4, lines 12-19).

As to claim 25, Singer discloses the computer-readable medium wherein the non-essential region in the image file comprises at least one non-essential block(see signed data portion 54 and signed data 60, Fig. 2).

As to claim 26, Singer discloses the computer-readable medium further comprising reserving at least one of a plurality of sectors(flash memory modules 28, see Fig. 1) in the memory device for storing the at least non-essential block.

As to claim 27, Singer discloses the computer-readable medium wherein updating only the non-essential region in the memory device comprises mapping the at least one non- essential block to the at least one reserved sector in the memory device(see column 2, lines 38-52).

As to claim 28, Singer discloses the computer-readable medium wherein updating only the non-essential region in the memory device comprises mapping each non-essential block to a portion of the at least one reserved sector in the memory device(see column 2, lines 38-52).

As to claim 29, Singer discloses the computer-readable medium wherein the portion of the at least one reserved sector in the memory device is a paragraph multiple(see column 2, lines 38-52).

As to claim 30, Singer discloses the computer-readable medium wherein the program code in the essential region comprises a power-on self test (POST) routine(see column 2, lines 27-37).

As to claim 31, Singer discloses the computer-readable medium wherein the at least one non-essential block comprises a header(BIOS file header 52, see Fig. 2) and at least one module(update code 62, see Fig. 2).

As to claim 32, Singer discloses the computer-readable medium wherein the header is located at the beginning of the at least one non-essential block(see Fig. 2).

As to claim 33, Singer discloses the computer-readable medium wherein the header comprises a pointer to a first module in the at least one non-essential block(see Fig. 2).

As to claim 34, Singer discloses the computer-readable medium wherein the at least one module comprises a module header(volume header 58, see Fig. 2) and module data(data 61, see Fig. 2).

As to claim 35, Singer discloses the computer-readable medium wherein the module header comprises a pointer to a next module in the at least one non-essential block(see Fig. 2).

As to claim 36, Singer discloses the computer-readable medium wherein the module data comprises program code(see Fig. 2).

As to claim 37, Singer discloses the computer-readable medium wherein the module data comprises at least one of graphics data, a language module, and diagnostic tools(see column 2, lines 45-47).

As to claim 38, Singer discloses a method of utilizing a non-essential region(signed data portion 54, see Fig. 2) in a memory device(flash memory 26, see Fig. 1) for executing updated program code, the method comprising searching the non-essential region in the memory device for at least one module(BIOS update file 50, see Fig. 2), wherein the memory device comprises a plurality of modules(unsigned data portion 56, see Fig. 2) containing program code(signed data 60, see Fig. 2) for a computer system(system 10, see Fig. 1) (see Item 102, Fig 3), and if the at least one module is found in the non-essential region, then executing the program code in the at

least one module, wherein the at least one module in the non-essential region contains an updated version of the program code for the computer system(see column 4, lines 12-19).

As to claim 39, Singer discloses the method further comprising if the at least one module(update code 62, see Fig. 2) is not found in the non-essential region, then searching an essential region in the memory device for the at least one module, wherein the at least one module in the essential region contains a current version(update command list 66, see Fig. 2) of the program code for the computer system , and if the at least one module is found in the essential region, then executing the program code in the at least one module(see column 2, line 38- column 3 line 11).

As to claim 40, Singer discloses the method wherein the at least one module further comprises a module header(volume header 68, see Fig. 2), the module header comprising an identification(signature 59, see Fig. 2) of the program code contained in the at least one module.

As to claim 41, Singer discloses the method wherein the updated version of the program code contained in the non-essential region comprises updated program code for BIOS in the computer system(see column 3, lines 49-58).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brown whose telephone number is (571)272-

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5932. The examiner can normally be reached on Monday-Friday from 7:00am to 3:30pm(EST).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIRS) system. Status information for the published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications are available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

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